

Panhandle Health District

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Mosquito Season Raises Threat of West Nile Virus

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After northern Idaho's never-ending winter, signs of summer are as welcome as the blue sky on a weekend. But mosquitoes are one harbinger of warm weather to eliminate as quickly as possible.

West Nile virus has transformed mosquitoes from pesky and irritating to threatening and potentially dangerous. The bite that leaves itchy bumps on the skin now may also deposit a virus into us that can cause fever, chills, headache, nausea, vomiting, rash, lingering fatigue and worse.

"We had one hawk in Benewah County test positive for West Nile virus last year, so the virus could be here this year," says Dave Hylsky, Panhandle Health District (PHD) epidemiologist. "It's hard to predict, so it's good to be prepared."

The species of mosquito that carries West Nile virus has spared northern Idaho so far. It swarmed the rest of the state in 2006, sickening nearly 1,000 people and contributing to 23 deaths.

Last year, Idaho reported 132 human cases of West Nile virus and one death. Again, the northern part of the state was spared. A handful of people were infected out of state and brought the virus home to the five northern counties. But West Nile virus does not spread from person to person. The virus went no further.

No one knows why the mosquitoes that carry West Nile virus haven't reached northern Idaho. The virus was identified in 1937 in the West Nile district of Uganda. It spread throughout Africa, Asia and southern Europe and didn't reach the United States until 1999. Since its arrival in New York, the virus has spread steadily across the nation to the west coast.

Its relentless path has raised expectations of its arrival in northern Idaho for years. Posters warning people to Fight the Bite offer information on West Nile virus in pharmacies, fire stations, sports stores and public gathering places.

To assess the threat last year, PHD collected mosquitoes at four different sites weekly throughout West Nile season to test for the virus. The results were all negative. PHD and the Idaho Dept. of Fish and Game encouraged people to report dead birds to them. PHD took reports of magpies, ravens, crows and jays--corvids. Fish and Game took reports of dead raptors. Dead birds are a warning sign that West Nile virus may be present in the area.

PHD will collect and test mosquitoes weekly again this year and take reports of dead corvids, at least until positive results show the virus is present. Kootenai County has hired a company to develop a mosquito abatement plan that's ready to go if the virus arrives.

The rest of the nation's experience with West Nile virus proves the preparation and precautions are necessary. Studies indicate that 80 percent of the people infected with the virus experience no symptoms and 20 percent have fever, chills, headache, persistent fatigue, nausea, vomiting and a rash. Of that 20 percent, less than 1 percent become severely ill with meningitis, encephalitis and a form of paralysis.

People older than 50 tend to develop West Nile virus symptoms in greater numbers than people younger than 50, but youth is no guaranteed protection from the virus. A 16-year-old in Melba, Idaho, lost 40 pounds and was on life support while he battled West Nile. He survived.

Infection most commonly starts with a mosquito bite, but the virus also can spread in blood transfusions, organ transplants and from mother to unborn baby. All donated blood is now tested for West Nile virus. The rare transmission of the virus from mother to unborn baby is under study.

There is no specific treatment for people with West Nile virus. Severe cases may require hospitalization, intravenous fluids, airway management, respiratory support and prevention of secondary infections such as pneumonia.

Considering how easy the virus is to catch and how difficult it is to fight, prevention is smart protection. Wearing mosquito repellent with DEET, Picardin or Oil of Lemon Eucalyptus when outdoors is advised. When mosquitoes are most active at dawn, dusk and early evening, it's wise to stay indoors or wear long pants, long sleeves and repellent outdoors.

To protect children, adults should spray repellent on their own hands and apply it to kids, avoiding their hands and face. Patching holes in window and door screens will help keep mosquitoes out of homes. Dumping standing water outside and changing water every few days in such items as bird baths and wading pools will eliminate potential mosquito breeding grounds.

West Nile virus also infects animals and causes severe problems in horses, raptors and corvids. There is a licensed vaccine for horses, available through veterinarians. There is no evidence that animals or birds transmit West Nile virus to people, either through contact or by eating them.

"We don't know when West Nile virus will arrive," PHD's Hylsky said. "But we can do our best to keep it out of the area for as long as possible."